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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,718	10/26/2001	David Ternes	279.405US1	2631
21186	7590	03/22/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH 1600 TCF TOWER 121 SOUTH EIGHT STREET MINNEAPOLIS, MN 55402			OROPEZA, FRANCES P	
			ART UNIT	PAPER NUMBER
			3766	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,718

Applicant(s)

TERNES ET AL.

Examiner

Frances P. Oropeza

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/18/06 (RCE and Amendment).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-33,35 and 37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-33,35 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/18/06.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. The Applicant's submission filed on 1/18/06 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 15-33, 35 and 37 are stand rejected under 35 U.S.C. 102(e) as being anticipated by Florio et al. (US 6512953). Florio et al. teach a system and method for automatically verifying capture during multi-chamber stimulation, comprising:

- pacing channels with an electrode, pulse generators and an interface (figure 2; col. 7 @ 27-67; col. 8 @ 18-30; col. 9 @ 1-6),
- a controller (microcontroller (60)); col. 8 @ 1-11; col. 16 @ 57-67; col. 17 @ 7-26),
- an evoked response sensing channel with an electrode and sense amplifier (figs. 2 & 4B;

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col. 4 @ 53-59; col. 7 @ 39-67; col. 8 @ 47-54; col. 12 @ 54-65),

- a controlled programmed to ultimately classify the evoked response representing a type of
- capture (the three types being: no capture, single chamber capture, and bi-chamber capture) based on the comparison and interpretation/ correlation of waveforms relative to a template; The templates are based on morphology, or energy/ amplitude (162, 163) within a sub-window time interval (190); Templates are established by threshold testing (abstract; col. 4 @ 53 – col. 5 @ 2; col. 9 @ 41-58; col. 13 @ 10 – col. 16 @ 12; col. 14 @ 13-23; col. 15 @ 5-35); Both ventricles are paced and are individually monitored and distinguished relative to capture (col. 4 @ 19-21; col. 7 @ 39-67; col. 8 @ 18-30; col. 8 @ 47-54; col. 13 @ 34-44; col. 5 @ 37-38),
- a telemetry interface (fig. 2 – 100, 104), and
- an external programmer/ external device capable of recording waveforms and compare the waveforms with a template to determine capture, the templates being no capture, capture of a single chamber and bi-chamber capture (fig. 2 – 102 ; col. 5 @ 25-34; col. 10 @ 8-19).

As to claims 17 and 28, the ECG can be a surface electrocardiogram (col. 4 @ 49-51).

Claim Rejections - 35 USC § 103

4. Claims 18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Florio et al. (US 6512953) in view of Sun et al. (US 5755739).

As discussed in paragraph 3 of this action, Florio et al. discloses the claimed invention except for the waveforms being compared by performing a time-domain cross-correlation.

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Sun et al. teaches signal analysis using time-domain correlation for the purpose of enhancing the classification of rhythms. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used time-domain correlations in the Florio et al. system in order to effectively evaluate the signal morphology so the point of loss of capture is clearly defined (col. 5 @ 6-19).

Statutory Basis


5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fran Oropeza whose telephone number is (571) 272-4953. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and for After Final communications.

Frances P. Oropeza
Patent Examiner
Art Unit 3762

FP
3/18/06


Robert E. Pezzuto
Supervisory Patent Examiner
Art Unit 3762